

Claims

1. An electropositive production well treating fluid, containing:

a) at least a cationic fluid loss additive with a content of 0.05-5% by weight;

b) at least a cationic viscosifier with a content of 0.05-5% by weight;

the contents above are both based on total weight of the production well treating fluid; and the balance is water.

2. A production well treating fluid according to claim 1, which further containing an electropositive mud-building agent for the production well treating fluid with a content of 0.5-6% by weight.

3. A production well treating fluid according to claim 1 or 2, which further containing an electrical stabilizing agent with a content of 0.1-15% by weight.

4. A production well treating fluid according to claim 1 or 2, which further containing at least an additive selected from the group consisting of colloid-stabilizing agent, lubricant, oil layer protective agent or weighting agent.

5. A production well treating fluid according to claim 3, which further containing at least an additive selected from the group consisting of colloid-stabilizing agent, lubricant, oil layer protective agent or weighting agent.

6. A production well treating fluid according to claim 1, which further containing:

c) electropositive mud-building agent for the production well treating fluid;

d) electrical stabilizing agent;

e) colloid-stabilizing agent;

f) lubricant;

g) oil layer protective agent; and

h) weighting agent.

7. A production well treating fluid according to claim 1, wherein said fluid loss additive is at least one selected from the group consisting of cationic polymer having low molecular weight, cationic starch, cationic modified cellulose, cationic lignin and cationic modified lignite.

8. A production well treating fluid according to claim 1, wherein said viscosifier is at least one selected from the group consisting of inorgano-electropositive glue, black organo-

electropositive glue, cationic guanidine glue, cationic polyacrylamide and polyquaternary ammonium salt.

9. A production well treating fluid according to claim 2, wherein said electropositive mud-building agent for the production well treating fluid is selected from the group consisting of a clay mineral which has a zeta potential higher than -10mv or a modified product of said clay mineral.

10. A production well treating fluid according to claim 3, wherein said electrical stabilizing agent is at least one selected from the group consisting of an inorganic salt of iron or aluminum, such as iron chloride, aluminum chloride, ferric sulfate, aluminum sulfate, hydroxyaluminium and organic cationic etherifying agent.

11. A production well treating fluid according to claim 1 or 2, which further containing at least an colloid-stabilizing agent with a content of 0.05-5% by weight therein.

12. A production well treating fluid according to claim 11, wherein said colloid-stabilizing agent is at least one selected from the group consisting of hydroxyethyl cellulose, biopolymer, polymeric alcohol and polysaccharide.

13. A production well treating fluid according to claim 1 or 2, which has a zeta potential higher than 0 mv.

14. A production well treating fluid according to claim 13, which has a zeta potential in the range of +10 mv to +60 mv.

15. A production well treating fluid according to claim 13, which has a zeta potential in the range of +21 mv to +29 mv.

16. A method of preparing a production well treating fluid according to any one of claims 1-6, which comprises mixing at least a cationic fluid loss additive, at least a cationic viscosifier and optional electropositive mud-building agent for the production well treating fluid, electrical stabilizing agent, colloid-stabilizing agent, lubricant, oil layer protective agent, weighting agent and water; wherein content of the cationic fluid loss additive is 0.05 - 5% by weight; content of the cationic viscosifier is 0.05 - 5% by weight, said contents are all based on total weight of the production well treating fluid.

17. Use of production well treating fluid according to claim 1 or 2 as a drilling fluid and a well completion fluid in the process of drilling and well completion.